What Is Claimed Is:

1. A method for speech recognition of an input vector in the Mandarin Chinese language comprising the step of utilizing a set of stationary Mandarin vowels as phonetic feature reference vowels.

2. The method of claim 1 wherein said set of stationary Mandarin vowels has nine members.

3. The method of claim 2 further comprising the step of calculating projection similarities of the input vector on said set of stationary Mandarin vowels;

4. The method of claim 3 further comprising the step of selecting a candidate vowel from said set of stationary Mandarin vowels responsive to the highest value of said projection similarity calculation.

5. The method of claim 2 further comprising the step of calculating relative projection similarities of the input vector on said set of stationary Mandarin vowels. The phonetic feature mapping is based on nine reference vectors.

6. The method of claim 5 further comprising the step of selecting a candidate vowel from said set of stationary Mandarin vowels responsive to the highest value of said relative projection similarity calculation.

7. A method for speech recognition of an input vector in the Mandarin Chinese language comprising the steps of:

    (a) selecting nine stationary reference Mandarin vowels for use as phonetic feature reference vowels;

    (b) calculating projection similarities of the input vector on said nine stationary Mandarin vowels;

    (c) calculating relative projection similarities of the input vector on said nine stationary Mandarin vowels;

    (d) selecting from among said nine stationary Mandarin vowels a set of high projection similarity vowels;

    (e) selecting from said set of high projection similarity vowels, the stationary Mandarin vowel having the highest relative projection similarity with the input vector; and

(f) selecting a vowel from said nine stationary reference Mandarin vowels responsive to the highest projection similarity calculation if said set of high projection similarity vowels is null.

8. The method of claim 7 further comprising the step of utilizing a scaling factor to control the degree of relative projection cross coupling, thereby increasing the discernibility of a phonetic feature.

9. A phonetic feature mapper for mapping an input speech spectrum vector comprising:

storage means for storing a set of nine stationary Mandarin reference spectrum vectors;

processing means, coupled to said storage means, for computing projection similarities of the input spectrum vector on said nine stationary Mandarin reference spectrum vectors; and

selection means, coupled to said processing means, for selecting at least one of said nine stationary Mandarin reference spectrum vectors responsive to the highest projection similarity values computed by said processing means.

10. A phonetic feature mapper for mapping an input speech spectrum vector comprising:

storage means for storing a set of nine stationary Mandarin reference spectrum vectors;

processing means, coupled to said storage means, for computing relative projection similarities of the input spectrum vector on said nine stationary Mandarin reference vectors; and

selection means, coupled to said processing means, for selecting at least one of said nine stationary Mandarin reference spectrum vectors responsive to the highest relative projection similarity values computed by said processing means.

11. A phonetic feature mapper for mapping an input speech spectrum vector comprising:

storage means for storing a set of nine stationary Mandarin reference spectrum vectors;

processing means, coupled to said storage means, for computing projection similarities and relative projection similarities of the input spectrum vector on said nine stationary Mandarin reference vectors;

selection means, coupled to said processing means, for selecting at least one of the nine stationary Mandarin reference spectrum vectors responsive to the computation of the projection similarity and relative projection similarity values computed by said processing means.

12. The phonetic feature mapper of claim 11 wherein said processing means further utilizes a scaling factor to control the degree of relative projection cross coupling, thereby increasing the discernibility of a phonetic feature.